

WAR CAUSES INCREASE IN USE OF TRACTORS

Automotive Engineers Assist Army Ordnance Department in Research Work.

By COKER P. CLARKSON, General Manager, Society of Automotive Engineers.

It is, of course, well known that mechanical traction has been utilized to a very large extent in the great war. It is a fact that the war could not have been conducted in anything like the present manner without the use of tractors, not to speak of motor trucks, motor boats, and railroads.

It has been appreciated for a long time that mechanical power can be employed in many ways for the transportation of troops, supplies, munitions of war, and guns. The haulage of field guns by European armies has been largely by mechanical power, and a great deal of development work has been done by the Ordnance Department of our army. In this country the first completely motorized field artillery battery.

The Ordnance Department is now doing a great deal of advanced work, some of the best trained officers in the army are devoting their entire attention to the subject. Several prominent members of the Society of Automotive Engineers are also engaged in the work. President George W. Davidson, of the society, is the civilian member of the Ordnance Department board for the Motorization of Field Artillery.

There are many logical reasons in favor of the substitution of motor-driven apparatus for horses in the marshalling of field guns. Horses of the required type are becoming more and more scarce and costly. It has been established that a type of tractor can be covered by the use of tractors when it would be impossible for horses. The tractor is more vulnerable to fire than a field artillery team of eight horses; on the other hand, the tractor is more maneuverable and can be repaired within shorter time than is required for a horse to recover from an ailment. Sentimental reasons, of course, are in favor of the horse being emancipated from the frequently harassing heavy work of gun haulage.

The Tractor Standards Division, of the Society of Automotive Engineers, is a member of the committee of the Council of National Defense, representing the tractor interests. The manufacturers of passenger cars, motor trucks, parts and accessories for automotive apparatus, aircraft, watercraft, and motorcycles are also represented on this committee which has within its jurisdiction some matters of a commercial nature, as well as those involving engineering problems.

The great potentiality of the farm tractor in the solution of the food problem is, of course, well appreciated. Many points are, however, involved in the adequate production and use of farm tractors. In the nature of a starting point is the fact that the average farmer is not well equipped with the knowledge of the tractor and is not trained as he should be in the operation of the mechanical apparatus.

There is no doubt that a great deal of tractor development, as an immediate result of military activities, is in sight. The most spectacular feature of this development is the military work, but the production of crops is greatly increased quantities of food consideration second to none in the national welfare.

AUTOMOBILE LICENSES.

- 5719—W. W. Alexander, Baltimore, Chasler, 1917.
- 5720—John Homan, Baltimore, Ford, 1917.
- 5721—George A. Rodgers, Towson, Md., Velle, 1917.
- 5722—H. S. Coleman, Baltimore, Maxwell, 1917.
- 5723—Scott Armstrong, Upper Marlboro, Md., Maxwell, 1917.
- 5724—L. L. Lasham, Fort Howard, Md., Maxwell, 1917.
- 5725—J. L. Bean, Bethesda, Md., Ford, 1917.
- 5726—Chas. F. King, Baltimore, Va., Ford, 1917.
- 5727—F. H. Smith, 428 D st. n. w., Davis, 1917.
- 5728—Thos. J. Hall, Albion, Md., Chevrolet, 1917.
- 5729—Earl Euse, Bethesda, Md., Chevrolet, 1917.
- 5730—Chas. Surcel, 1206 N. Y. ave., Ford, 1917.
- 5731—D. B. Edmondson, Bethesda, Md., Ford, 1917.
- 5732—L. L. Croshaw, Baltimore, Allen, 1917.
- 5733—A. W. Dobb, 222 1/2 st. n. w., Ford, 1917.
- 5734—A. A. Miller, Hattiesville, Md., Buick, 1917.
- 5735—Joe Mangor, Silver Spring, Md., Buick, 1917.
- 5736—John K. Wilson, Baltimore, Hudson, 1917.
- 5737—Wm. W. Strain, 221 1/2 st. n. w., Cadillac, 1917.
- 5738—Standard Motor Co., Baltimore, Cadillac, 1917.
- 5739—John J. Keegan, Bethesda, Md., Studebaker, 1917.
- 5740—Ordnance Office, War Dept., Ford, 1917.
- 5741—Ordnance Office, War Dept., Ford, 1917.
- 5742—W. B. Hartman, Baltimore, Overland, 1917.
- 5743—Wm. N. Robertson, 67 U st. n. w., Ford, 1917.
- 5744—Herman E. Hobbs, Linden, Md., Stearns, 1917.

5745—J. J. Richardson, 220 1/2 st. n. w., Buick, 1917.

5746—R. C. Shadick, Baltimore, Ford, 1917.

5747—L. K. McEwen, Baltimore, Ford, 1917.

5748—W. W. Gifford, 226 1/2 st. n. w., Buick, 1917.

5749—Alphonsus Lee, Scotland, Md., Little, 1917.

5750—H. L. Tammann, Frederick, Md., Overland, 1917.

5751—H. L. Lovenan, Baltimore, Paig, 1917.

5752—Wm. Kurth, Baltimore, Rec, 1917.

5753—Dr. John P. Briscoe, 1209 Conn. ave., Buick, 1917.

5754—A. A. Hackett, R. New Market, Md., Ford, 1917.

5755—R. W. Williams, 1613 N. J. ave., Buick, 1917.

5756—W. W. Gifford, 226 1/2 st. n. w., Buick, 1917.

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